- (e)(1) At least two units of approved self-contained breathing apparatus, one stowed forward of the cargo tanks and one stowed aft of the cargo tanks, shall be carried on board the vessel at all times.
- (2) All approved self-contained breathing apparatus, masks and respiratory protective devices shall be of types suitable for starting and operating at the temperatures encountered, and shall be maintained in good operating condition.
- (3) Personnel involved in the filling or discharge operations shall be adequately trained in the use of the equipment.
- (4) For all self-propelled cargo vessels, during filling or discharge operations every person on the vessel shall carry on his person or have close at hand at all times a canister mask approved for ammonia; or each person shall carry on his person a respiratory protective device which will protect the wearer against ammonia vapors and provide respiratory protection for emergency escape from a contaminated area which would result from cargo leakage. This respiratory protective equipment shall be of such size and weight that the person wearing it will not be restricted in movement or in the wearing of lifesaving device.
- (f) While fast to a dock, a vessel during transfer of bulk cargo shall display a red flag by day or a red light by night, which signal shall be so placed that it will be visible on all sides. When at anchor, a vessel during transfer of bulk cargo shall display a red flag by day, which signal shall be so placed that it will be visible on all sides.

[CGFR 70-10, 35 FR 3712, Feb. 25, 1970, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983; CGD 95-072, 60 FR 50464, Sept. 29, 1995; CGD 96-041, 61 FR 50730, Sept. 27, 1996]

$\S 98.25-95$ Tests and inspections.

- (a) Each tank shall be subjected to the tests and inspections described in this section in the presence of a marine inspector, except as otherwise provided in this part.
- (1) An internal inspection of the tank is conducted within—
- (i) Ten years after the last internal inspection if the tank is a pressure-vessel type cargo tank on an unmanned

barge described under \$151.01-25(c) of this chapter and carrying cargo at temperatures of $-67~^{\circ}F$ ($-55~^{\circ}C$) or warmer;

- (ii) Eight years after the last internal inspection if the tank is of a type other than that described in paragraph (a)(1)(i) of this section.
- (2) An external examination of unlagged tanks and the visible parts of lagged tanks is made at each biennial inspection. The owner shall ensure that the amount of insulation deemed necessary by the marine inspector is removed from insulated tanks during each internal inspection to allow spot external examination of the tanks and insulation, or the thickness of the tanks may be gauged by a non-destructive means accepted by the marine inspector without the removal of insulation.
- (3) If required by the Officer in Charge, Marine Inspection the owner shall conduct nondestructive testing of each tank in accordance with §98.25-97.
- (4) If the tank is a pressure vessel type cargo tank with an internal inspection interval of 10 years, and is 30 years old or older, determined from the date it was built, the owner shall conduct nondestructive testing of each tank in accordance with §98.25-97, during each internal inspection.
- (b) A hydrostatic test of 1½ times the maximum allowable pressure as determined by the safety relief valve setting shall be made at any time that the inspector considers such hydrostatic test necessary to determine the condition of the tank. If the jacket and lagging are not removed during the hydrostatic tests prescribed in this paragraph, the tank shall hold the hydrostatic test pressure for at least 20 minutes without a pressure drop.
- (c) The safety relief valves shall be popped in the presence of a marine inspector by either liquid, gas or vapor pressure at least once every four years to determine the accuracy of adjustment and, if necessary, shall be reset.

[CGFR 65-50, 30 FR 17022, Dec. 30, 1965, as amended by CGFR 67-86, 32 FR 17622, Dec. 9, 1967; CGD 85-061, 54 FR 50965, Dec. 11, 1989]

§98.25-97 Nondestructive testing.

(a) Before nondestructive testing may be conducted to meet §98.25–95(a)